# **REMARKS**

Applicants thank the Examiner for the thorough consideration given the present application.

Claims 1, 12, 13 and 15-17 are pending in the present application. Claim 14 has been cancelled, and claims 1, 12, 13 and 15-17 have been amended. Amended claim 1 is supported by at least the third paragraph on page 3 of the present specification, and amended claims 12 and 13 are supported by at least original claim 1. No new matter is believed to have been added.

Reconsideration of this application, as amended, is respectfully requested.

### Objection to claim 14

Regarding the objection to claim 14, claim 14 has been cancelled.

## Rejection under 35 U.S.C. § 112, second paragraph

Regarding the rejection to claim 1, a term "the balance being monoglyceride, triglyceride or a mixture thereof" has been cancelled.

#### Rejections under 35 U.S.C. §§ 102(e) and 103(a)

Claim 1 is rejected under 35 U.S.C. § 102(e) as being anticipated by Koike '886. Also, claims 1 and 12-17 are rejected under 35 U.S.C. § 103(a) as being obvious over Koike '886 and Sakuma '265. Further, claims 1 and 12-17 are rejected under 35 U.S.C. § 103(a) as being obvious over Krumhar '453 in view of Koike '886 or Sakuma '265. Furthermore, claims 1 and

12-17 are rejected under 35 U.S.C. § 103(a) as being obvious over Bonsignore '356 in view of Koike '886 or Sakuma '265 These rejections are respectfully traversed.

While not acquiescing to the Examiner's rejections, claim 1 has been amended to further emphasize the distinctions between the present invention and the cited art. In particular, the conjugated linoleic acid of claim 1 has been amended to recite "cis-9, trans-11 octadecadienoic acid or trans-10, cis-12 octadecadienoic acid".

Accordingly, independent claim 1 recites a fat composition of high purity diglyceride comprising: 85% to 99.9 % by weight of a diglyceride containing 0.1 to 80 % by weight of a conjugated linoleic acid, wherein the conjugated linoleic acid is *cis-9*, *trans-11* octadecadienoic acid or *trans-10*, *cis-12* octadecadienoic acid.

In contrast, Koike '886 fails to disclose or suggest the claimed diglyceride containing 0.1 to 80% by weight of conjugated *cis*-9, *trans*-11 octadecadienoic acid or *trans*-10, *cis*-12 octadecadienoic acid. Instead, Koike '886 discloses that the diglyceride has omega 3-unsaturated fatty acid and a *cis* omega omega fatty acid at a weight ration of 1 to 6. As well known in the art, this omega fatty acid (or called *n*-3 fatty acid) is methylene-interrupted polyenes (-C-C-C-C-C-C-C-), with 2 or more *cis* double bonds which are separated from each other by a single methylene group. In particular, column 3, lines 1-7 of Koike '886 discloses that the term "omega 3-unsatruated fatty acid a fatty acid" as used herein means a fatty acid having a first unsaturated bond at the third carbon atom from the – position and having at least two carbon-carbon unsaturated bonds. Specific examples of Koike '886 include alpha-linoleic acid (all *cis*-9,12,15-octadecatrienoic acid) and stearidonic acid (all *cis*-6,9,12,15-octadecatetraenoic acid) with alpha-linoleic acid being particularly preferred.

However, the claimed conjugated linoleic acid being *cis-9*, *trans-11* octadecadienoic acid or *trans-10*, *cis-12* octadecadienoic acid (or called *n-6* fatty acid) has the conjugated double bonds (–C=C-C=C-), which is not a methylene-interrupted double bond and thus is patentably distinct from Koike '886. In other words, Koike '886 employs an alpha-linoleic acid while the present invention claims a conjugated linoleic acid, *cis-9*, *trans-11* octadecadienoic acid or *trans-10*, *cis-12* octadecadienoic acid. Therefore, Koike '886 fails to disclose or suggest the claimed conjugated linoleic acid.

Similar arguments apply to Sakuma '265 because Sakuma '265 employs the same omega 3-unsaturated fatty acids as those of Koike '886. See, column 3, lines 3-16. Therefore, Sakuma '265 fails to disclose or suggest the claimed conjugated linoleic acid, *cis-9*, *trans-11* octadecadienoic acid or *trans-10*, *cis-12* octadecadienoic acid.

Further, regarding Krumhar '453 and Bonsignore '356, as noted in the previous Reply dated January 22, 2008, the claimed invention has a higher content (85% to 99.9% by weight) of diglyceride as compared to Krumhar '453. More specifically, the primary constituent of the claimed invention is diglyceride of conjugated linoleic acid (CLA), *cis-9*, *trans-11* octadecadienoic acid or *trans-10*, *cis-12* octadecadienoic acid while the contents of the monoglyceride and triglyceride are low. However, the primary constituent of Krumhar '453 is triglyceride of CLA, and the contents of the monglyceride and especially diglyceride are low. Column 5, lines 29-31 of Krumhar '453 discloses that the glycerides resulting from esterification of CLA with glycerol can be monoglyceride, diglyceride, or triglyceride, or mixtures thereof, but triglycerides are preferred. From this fact, Krumhar '453 are more focused on triglycerides, rather diglycerides.

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Furthermore, Bonsignore '356 has a higher content of triglycerides like Krumhar '453. Specifically, paragraph [0033] of Bonsignore '356 discloses that "CLA-TG (triglyceride of CLA) forms eliminates the negative feedback intake characteristics associated with the CLA in the fatty acid form, thus greatly reducing the otherwise known requirements of specific ratio between the two bioactive isomers." Also, the manufacturing process disclosed in the Examples, and claims 9 and 10 of Bonsignore '356 are focused on CLA-TG or CLA-MG (monoglyceride of CLA). In more detail, see paragraphs [0037]-[0038] and Examples [0080] to [0099] of Bonsignore '356. Therefore, Bonsignore '356 merely teaches that CLA-TG and CLA-MG are preferred for an intended purpose, but fails to recognize the claimed CLA-DG (diglyceride of CLA) and the relevant using range. From the referred paragraphs, it is evident that the primary and preferred constituent of the composition of Bonsignore '356 is CLA-TG. Therefore, Krumhar '453 and Bonsignore '356 fail to teach or suggest the claimed CLA-DG and the range.

Therefore, these deficiencies of Krumhar '453 and Bonsignore '356 cannot be cured by combination of Koike '886 or Sakuma '265 as discussed above. In particular, since the type of the linoleic acid as disclosed in Koike '886 and Krumhar '453 are structurally different from each other, Koike '886 cannot be combined with Krumhar '453.

As the MPEP directs, all the claim limitations must be taught or suggested by the prior art to establish a prima facie case of anticipation or obviousness. See MPEP §§ 2131 and 2143.03. In view of the fact that the cited references fail to teach or fairly suggest that a fat composition of high purity diglyceride comprising: 85% to 99.9 % by weight of a diglyceride containing 0.1 to 80 % by weight of a conjugated linoleic acid, wherein the conjugated linoleic acid is *cis-9*, *trans-*

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11 octadecadienoic acid or *trans*-10, *cis*-12 octadecadienoic acid, a prima facie case of anticipation or obviousness cannot be said to exist.

In light of the above remarks, since amended independent claim 1 of the present application is believed to overcome the 35 USC §§ 102(b) and 103(a) rejections, the dependent claims therefrom are also believed to address the same prior art rejections. Therefore, the Examiner is respectfully requested to withdraw these rejections.

## Conclusion

In view of the above remarks, it is believed that the present claims are put in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact James T. Eller, Jr., Reg. No. 39,538 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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